

SYSTEM SUPPORT DIRECTIVE

ASR9

SDR-ASR9-012

System Documentation Release

UPDATE TO SSM-ASR9-018 SAFETY MODIFICATION SAFETY ANCHOR BRACKET WORK POSITIONING

Highlights

- Corrections to SSM-ASR9-018

02/11/2005

1. PURPOSE. This system documentation release (SDR) provides corrections to SSM-ASR9-018, Safety Modification, Safety Anchor Bracket, Work Positioning. No CCD number is required for this SDR.

2. DISTRIBUTION.

a. This SDR is distributed to selected offices having the following facilities/equipment: ASR-9.

b. An electronic version and distribution report of this SDR are available on an Intranet site located at <http://aos-ext.amc.faa.gov/> under the "Technical Documentation" heading.

c. To obtain additional hard copies of this publication, contact Printing & Distribution Team, AMI-700B, at (405) 954-6892.

3. WITHDRAWALS/CANCELLATIONS. None.

4. APPLICATION. The revised pages apply to all holders of SSM-ASR9-018.

SSD PAGE CONTROL CHART

Remove Pages	Dated	Insert Pages	Dated
<u>SSD TOC</u>			
All pages	All dates	All pages	02/11/2005
<u>SSM-ASR9-018</u>			
1 thru 5	11/22/2004	1	11/22/2004
		2 through 5	02/11/2005

5. CHANGES TO RECORDED DATA. Process a modification record and place this record into the Facility Reference Data File (FRDF) in accordance with the latest Order 6032.1 National Airspace System Modification Program and Order 6030.45 Facility Reference Data File.

DISTRIBUTION: 53AC

INITIATED BY: ASR-9
Terminal/RDAS Branch

6. ADDRESS CHANGES. Submit facility address changes to your regional Directive Distribution System (DDS) point of contact. An updated list of DDS contacts may be found online at http://aos-ext.amc.faa.gov/technical_library/DDSList.html.

7. RISKS. If changes are not incorporated, unauthorized configuration may degrade the efficiency of the National Airspace Systems (NAS) and the ability to maintain operations.

8. STATUS ACCOUNTING. The maintenance organization does not open LEM entries for documentation releases because the Facility/Service Equipment Profile (FSEP) does not clearly identify where all documentation is located. Providing your equipment is listed in the FSEP, you should open a Log Equipment Modification (LEM) record in the Maintenance Management System (MMS) for the system to be modified from paragraph 4, Application.

- a. Upon completion of this modification, you are required to close the LEM record and change the Maintenance Action Code (MAC) to:
 - (1) **"G"** if the modification was completed.
 - (2) **"W"** if the modification is not applicable.
- b. Verify that an "N" is in the "REP COD" field to ensure that the log entry will be upwardly reportable to the national database for National MOD Tracking.
- c. The data entry record is to be entered into the LEM as follows:

MMS FIELD NAME	DATA ENTRY
FAC/SERV:	Enter your facility/service type.
LOC INDENT:	Enter your site identification.
SHORT NAME:	Enter the short name for this equipment from MMS
ORDER#/SYSTEM:	SDR-ASR9
CHAP/SEQ#:	012
CHG:	D



for Richard A. Thoma
Director, Technical Operations Support

LIST OF APPENDIXES AND ATTACHMENTS

ITEM	DESCRIPTION	QUANTITY
ATTACHMENT 1	SSD TABLE OF CONTENTS	1
ATTACHMENT 2	SSM PAGE CHANGES	1

ATTACHMENT 1. SSD TABLE OF CONTENTS

SYSTEM SUPPORT DIRECTIVE (SSD)**TABLE OF CONTENTS*****SYSTEM SUPPORT MODIFICATIONS (SSM)***

<u>Document Number</u>	<u>Date Issued</u>	<u>Title</u>
SSM-ASR9-001	04/23/99	ASRS-9 SERIAL INTERFACE SYSTEM
SSM-ASR9-002	02/06/98	TRANSMITTER POWER INTERRUPT AND BLOWER MOTOR FUSE
SSM-ASR9-003	10/19/99	REMOVAL OF CIRCUIT BREAKERS FROM MODEM RACK
SSM-ASR9-004	03/13/98	UPGRADE MODE-S INTERFACE SUPPORT
SSM-ASR9-005	04/01/99	PROCESSOR AUGMENTATION CARD PHASE I
SSM-ASR9-006	04/29/98	ASR-9 REMOTE SCIP CIRCUIT BREAKER WIRING CONNECTION
SSM-ASR9-007	06/07/99	ALTERNATE DUAL REDUNDANT MODIFICATION
SSM-ASR9-008	08/02/99	MUFFIN FAN REPLACEMENT
SSM-ASR9-009	TBD	PROCESSOR AUGMENTATION CARD PHASE II
SSM-ASR9-010	CANCELLED	ASR-9 UPDATES
SSM-ASR9-011	03/26/03	SOFTWARE SUPPORT FOR THE WEATHER SYSTEMS PROCESSOR
SSM-ASR9-012	06/19/03	WEATHER SYSTEMS PROCESSOR INTERFACE TO THE ASR-9
SSM-ASR9-013	06/05/01	ASR-9 SERIAL INTERFACE SYSTEM (ASIS) PHASE II
SSM-ASR9-014	05/20/04	ANOMALOUS PROPAGATION (AP) FILTER
SSM-ASR9-015	TBD	UPDATE PROCOMM PLUS SCRIPTS
SSM-ASR9-016	07/14/03	ASR-9 SERIAL INTERFACE SYSTEM (ASIS) PHASE II DUAL BOARD

SYSTEM SUPPORT MODIFICATIONS (SSM) (Continued)

<u>Document Number</u>	<u>Date Issued</u>	<u>Title</u>
SSM-ASR9-017	TBD	ASR-9 SERIAL INTERFACE SYSTEM (ASIS) PHASE II -- SMART MODE SOFTWARE
SSM-ASR9-018	11/22/04	SAFETY ANCHOR BRACKET
SSM-ASR9-019	12/21/04	RECEIVER PROTECTOR REPLACEMENT

SYSTEM TECHNICAL RELEASES (STR)

<u>Document Number</u>	<u>Date Issued</u>	<u>Title</u>
STR-ASR9-001	02/06/98	DELIVERY OF AIRPORT SURVEILLANCE RADAR-9 PROCOMM SOFTWARE UPDATE
STR-ASR9-002	12/29/98	DELIVERY OF AIRPORT SURVEILLANCE RADAR-9 PROCOMM SOFTWARE UPDATE VERSION 5.0
STR-ASR9-003	11/29/99	DELIVERY OF AIRPORT SURVEILLANCE RADAR-9 SOFTWARE UPDATE VERSION 6.0
STR-ASR-9-004	12/15/99	ASR-9 VARIABLE SITE PARAMETERS AND PROGRAMMABLE ALARM THRESHOLD/FILTER BASELINE
STR-ASR9-004A	06/20/01	ASR-9 VARIABLE SITE PARAMETERS AND PROGRAMMABLE ALARM THRESHOLD BASELINE UPDATES

SYSTEM DOCUMENTATION RELEASES (SDR)

<u>Document Number</u>	<u>Date Issued</u>	<u>Title</u>
SDR-ASR9-001	CANCELLED	BY SDR-ASR9-002
SDR-ASR9-002	CANCELLED	BY SDR-ASR9-003

SYSTEM DOCUMENTATION RELEASES (SDR) (Continued)

<u>Document Number</u>	<u>Date Issued</u>	<u>Title</u>
SDR-ASR9-003	05/09/02	ASR-9 TECHNICAL INSTRUCTION BOOKS UPDATE AND REISSUE OF ASR- 9 TI CD ROM
SDR-ASR9-004	09/02/03	DELIVERY OF THE AIRPORT SURVEILLANCE RADAR-9 OPTIMIZATION PROCEDURES
SDR-ASR9-005	07/12/04	UPDATE TO STR-ASR9-004A
SDR-ASR9-006	01/23/04	UPDATE TO SSM-ASR9-012 OMIT INCORPORATION OF TI 6310.28 PAGE CHANGES
SDR-ASR9-007	TBD	UPDATE TO TI 6310.28
SDR-ASR9-008	CANCELLED	UPDATE TO EEM 6310.18, CHG. 19, CHAP. 16
SDR-ASR9-009	11/02/04	UPDATE TO TI 6310.25
SDR-ASR9-010	10/08/04	UPDATE TO SSM-ASR9-014
SDR-ASR9-011	10/06/04	ANTENNA WRENCHES
SDR-ASR9-012	02/11/05	UPDATE TO SSM-ASR9-018

ATTACHMENT 2. SSM PAGE CHANGES

SYSTEM SUPPORT DIRECTIVE

ASR9

SSM-ASR9-018

6310

System Support Modification

SAFETY MODIFICATION SAFETY ANCHOR BRACKET WORK POSITIONING

Highlights

- New anchor bracket for OSHA required body harness

11/22/2004

1. PURPOSE. THIS IS A SAFETY MODIFICATION. This modification will provide an Occupational Safety Hazard Administration (OSHA) required component, to the ASR-9 antenna, in order to provide a work positioning tie point on the backside of the antenna.

2. DISTRIBUTION.

a. This SSM is distributed to selected offices and services within Washington headquarters, the William J. Hughes Technical Center, the Mike Monroney Aeronautical Center, regional Airway Facilities divisions, and Airway Facilities field offices having the following facilities/equipment: ASR9.

b. An electronic version and distribution report of this SSM are available on an Intranet site located at <http://aos-ext.amc.faa.gov/> under the "Technical Documentation" heading.

c. To obtain additional hard copies of this publication, contact Printing & Distribution Team, AMI-700B, at (405) 954-6892.

3. WITHDRAWALS. None.

4. REFERENCES.

a. OSHA requirement for technicians performing essential two-handed maintenance.

b. TI 6310.30, Rotary Joint (Unit 8), Pedestal (Unit 9), Radar Antenna (Unit 10), and Antenna Control (Unit 11)

c. Configuration Control Decision (CCD) No. N23298, ASR-9 Tower, Hoist Installation and OSHA Modification Drawing Baseline.

5. BACKGROUND. Sites require an anchor point to attach a safety harness. The design of the ASR9 antenna did not have an adequate point to latch the harness onto. The included plates will provide the necessary anchor point for a work positioning harness.

6. APPLICATION. This modification applies to all ASR9 antennas.

DISTRIBUTION: 53AC

INITIATED BY: ASR-9 Terminal/RDAS
Branch

- * **7. MATERIALS REQUIRED.** The following material is required to modify each unit and is available in kit form on NSN 0000-00-012-1729.

	<u>Description</u>	<u>NSN</u>	<u>Quantity</u>
a.	6061-T6 Aluminum Plate	5340-01-519-6823	2 each
b.	1/4" -28 1.75" stainless steel bolt		4 each
c.	316 Stainless steel washers		8 each
d.	316 Stainless steel Lock Washers		4 each
e.	316 Stainless steel Hex Nut		4 each
f.	Paint Kit (2oz glass bottle Int'l Orange paint)		1 each

8. SOURCE OF MATERIALS. The modification kit is to be ordered through the Logistics and Inventory System (LIS) at the FAA Logistics Center (FAALC). In order to prevent depletion of the material, only order the quantity required. If any problems arise in receiving the kit, site personnel should contact AOS-270 Team by telephoning (609) 485-HELP. *

9. SPECIAL TOOLS AND TEST EQUIPMENT REQUIRED.

- a. Two (2) - 7/16" wrenches.
- b. Can of WD-40 or similar product.
- c. Hammer
- d. Torque wrench

10. PROCEDURE TO BE PERFORMED BY. Field maintenance personnel.

11. WHEN MODIFICATION IS TO BE PERFORMED. As soon as practical after receipt of this modification.

12. ESTIMATED TIME REQUIRED. One hour per radar site. Estimated time does not include modification preparation or updating of the instruction books.

13. DISPOSITION OF SURPLUS PARTS. None.

14. PROCEDURE.

- * a. Use RMS SYSTEM CONTROL PANEL menu (0.1.1) to turn OFF high voltage for both transmitters.
- b. Use RMS APG, MONITOR PANEL VIDEO AND STC SELECTION menu (0.1.3) and select internal Azimuth Pulse Generation (APG), command number 3.
- c. Use RMS SYSTEM CONTROL PANEL menu (0.1.1) to turn antenna OFF.

NOTE: Ensure that both beacon transmitters are OFF. *

- * d. In the ASR-9 power panel A15, switch MTR 1 and MTR 2 circuit breakers OFF. Place maintenance tag on panel.
- e. At Antenna Control (Unit 11), place SAFE/OPERATE lever in SAFE position to gain access to antenna deck level. Use key lock to secure lever.
- f. Follow OSHA requirements for fall protection, put on safety harness with work positioning cable.
- g. Climb ladder located on the back of the ASR-9 Antenna, to the second tier. (Figure 1)
- h. Secure safety harness around ladder as a temporary measure.
- i. Remove the two bolts from either designated areas (Figure 2 or 3). Due to possible corrosion, bolts could be stuck. Apply WD-40 or similar product and allow to penetrate until bolt can be freed. Tap lightly with hammer too loosen any remaining corrosion. Take care not to distort bolts in the process.
- j. Fit bracket over rivet hole and slide a new bolt (with washer) into bottom hole facing upwards. Then add the second washer, lock washer and then nut. (Figure 4 and 5) Once both bolts have been added, proceed to tighten down to a torque rating of around 95 (+/- 5) inch pounds.
- k. Repeat steps (g) and (h) to install the second bracket. (Figure 2 or 3)
- l. Use the paint bottle supplied to touch up the installation hardware with the Intl' Orange paint. Let paint dry for 15 minutes prior to antenna start up. Final product should resemble those in Figure 4 and 5.
- m. Close antenna deck access gate. At Antenna Control (Unit 11), unlock SAFE/OPERATE lever and place lever in OPERATE position.
- n. In the ASR-9 power panel A15, switch MTR 1 and MTR 2 circuit breakers ON. Remove maintenance tag.
- o. Use RMS SYSTEM CONTROL PANEL menu (0.1.1) to turn antenna ON.
- NOTE: Turn ON beacon transmitters.
- p. Use RMS APG, MONITOR PANEL VIDEO AND STC SELECTION menu (0.1.3) and select APG 1 command number 1.
- q. Use RMS SYSTEM CONTROL PANEL menu (0.1.1) and put high voltage ON in the online transmitter.
- r. Restore system to original configuration. *

15. TEST AFTER MODIFICATION. None.

16. RESULT OF MODIFICATION. Two anchor brackets for a worker's safety harness.

17. CHANGES TO INSTRUCTION BOOKS.

PAGE CONTROL CHART

Remove Pages	Dated	Insert Pages	Dated
All Pages	All Dates	SSD TOC All Pages	11/22/2004
3-3 through 3-8	undated	TI 6310.30 3-3 3-4	undated 11/22/2004

18. CHANGES TO INSTALLATION DRAWINGS. None.

19. CHANGES TO RECORDED DATA. Enter this SSD number, date, chapter, and change number on the appropriate FAA Form 6032-1, Airway Facilities Modification Record.

20. ADDRESS CHANGES. Submit facility address, copy count, and additions or deletions to Carrie Batty via email to carrie.ctr.batty@faa.gov.

21. CLARIFICATION OR COMMENTS. This chapter will be included in the next revision to the table of contents.

22. RISKS. If changes are not incorporated, unauthorized configuration may degrade the efficiency of the National Airway Systems (NAS) and the ability to maintain operations.

23. FALLBACK PROCEDURES. If changes are not incorporated or unattainable by the installer, contact AOS-200 for field support assistance to clarify procedures and options.

24. STATUS ACCOUNTING. Providing your equipment is listed in the Facility/Service Equipment Profile (FSEP), the Maintenance Organization has opened a Log Equipment Modification (LEM) record in the Maintenance Management System (MMS) for the system to be modified from Paragraph 6, Application.

- a. Upon completion of this modification, you are required to close the LEM record and change the Maintenance Action Code (MAC) to:
 - (1) **"G"** if the modification was completed.
 - (2) **"W"** if the modification is not applicable.
- b. Verify that an "N" is in the "REP COD" field to ensure that the log entry will be upwardly reportable to the national database for National MOD Tracking.

MMS FIELD NAME	DATA ENTRY
FAC/SERV:	ASR
LOC IDENT:	XXX

NOTE: Enter your site identification code associated with the FSEP facility identification code for ASR9, 53AC

SHORT NAME: SYS

NOTE: The regional person processing this entry should change SYS to the acronym for Line Replacement Unit (LRU) modified.

ORDER#/SYSTEM:	SSM-ASR9
CHAP/SEQ#:	018
CHG:	HW

If you have questions about the LEM entries made by the maintenance engineering organization, please call Trudy Green (405) 954-4421.

25. RECOMMENDATIONS FOR CHANGES. Forward any recommendations for changes to this directive through normal channels to the National Airway Systems Engineering Office, Operational Support.



for Richard A. Thoma
Director for Technical Operations Support

LIST OF APPENDIXES AND ATTACHMENTS		
ITEM	DESCRIPTION	QUANTITY
APPENDIX 1	TEST AND EVALUATION GOLD STANDARD CONSIDERATIONS	1
ATTACHMENT 1	ANTENNA BRACKETS	1
ATTACHMENT 2	SSD TABLE OF CONTENTS	1
ATTACHMENT 3	INSTRUCTION BOOK CHANGES	1

